Tick-borne Disease Surveillance in Florida, 2006

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Lyme disease

In 2006, thirty-four cases of Lyme disease were reported in Florida. As seen in Figure 1, 6 (17.6%) were acquired in Florida, 24 (70.6%) were acquired in the United States but not in Florida, 2 (5.9%) were acquired outside the United States, and for 2 (5.9%) the location where the disease was acquired is unknown.

Figure 1



Among the individuals reported as having acquired the disease in Florida (6 cases) there were more females (66.7%) than males (33.3%). The average age of individuals was 41.7 years old (range 17-74 years). Of the cases, 2 (33.3%) were white non-Hispanic, 1 (16.7%) was white Hispanic, 1 was white with unknown ethnicity, 1 was Hispanic with the race unknown, and for 1 both race and ethnicity were unknown. Three cases resided in the central region* of Florida and 1 (16.7%) resided in each of the following regions: southern, northern, and panhandle. All of the cases met the case definition for confirmed Lyme disease. One symptom onset occurred in each of the following months: January, July, August, September, October, and December.

Of the six cases acquired in Florida, 4 (66.7%) reported having erythema migrans (EM) of at least 5cm in diameter and 2 (33.3%) did not (Table 1). Three (50%) cases were reported having arthritis characterized by brief attacks of joint swelling, and the other half did not. Five cases (83.3%) did not

report either Bell's palsy or other cranial neuritis, or radiculoneuropathy, and for 1 case it was not specified. Four cases (66.7%) did not report lymphocytic meningitis, for 1 (16.7%) it was unknown, and for the remaining case it was not specified. One individual was diagnosed with encephalitis/encephalomyelitis, 4 (66.7%) were not, and for one case it was not specified. In three (50%) cases there was no 2nd or 3rd degree atrioventricular block, in 2 (33.3%) it was unknown, and in 1 case it was not specified.

Symptom	Present	Not present	Unknown	Not specified
Erythema Migrans	4 (66.7%)	2 (33.3%)	0	0
Arthritis	3 (50%)	3 (50%)	0	0
Bell's Palsy or other cranial neuritis	0	5 (83.3%)	0	1 (16.7%)
Radiculoneuropathy	0	5 (83.3%)	0	1 (16.7%)
Lymphocytic meningitis	0	4 (66.7%)	1 (16.7%)	1 (16.7%)
Encephalitis/encephalomyelitis	1 (16.7%)	4 (66.7%)	0	1 (16.7%)
2 nd or 3 rd atrioventricular block	0	3 (50%)	2 (33.3%)	1 (16.7%)

Table 1.

Rocky Mountain spotted fever

In 2006, twenty cases of Rocky Mountain spotted fever were reported. Of these, 13 (65%) were acquired in Florida, 4 (20%) were acquired in the United States but not in Florida, and for 3 (15%) cases the location of where the disease was acquired is unknown. Of the thirteen cases acquired in Florida, 4 (30.8%) were female and 9 (69.2%) were male. The average age was 43.8 years old (range 19-64 years). Ten individuals (76.9%) were white non-Hispanic, 1 (7.7%) was white Hispanic, and for 2 (15.4%) both race and ethnicity were unknown. Five cases (38.4%) resided in the panhandle region* of Florida and 4 (30.8%) resided each in the following regions: central and northern. Over half (84.6%), of the cases met the case definition for probable Rocky Mountain spotted fever and 2 (15.4%) met the case definition for confirmed Rocky Mountain spotted fever. As Figure 2 shows, 2 (15.4%) cases had an onset of symptoms that occurred each in the following months: March, April, October, and November and 1 (7.7%) occurred each in the following months: March, April, October, and September.





Human Monocytic Ehrlichiosis

In 2006, four cases of Human Monocytic Ehrlichiosis (HME) were reported in Florida. Of these, 3 (75%) were acquired in Florida and 1 (25%) was acquired in the United States but not in Florida. Of the three cases acquired in Florida, 1 was female and 2 were male. The average age of the individuals was 61.7 years old (range 55-68 years). Two cases were white non-Hispanic and 1 was white with unknown ethnicity. One case resided each in the following regions* of Florida: northern, panhandle, and central. One case met the case definition for confirmed HME and the remaining two met the case definition for probable HME. One case occurred in each of the following months: April, July, and September.

Anaplasmosis

In 2006, there were two cases of Anaplasmosis (formerly Human Granulocytic Ehrlichiosis) reported in Florida. Of these, one was acquired in Florida and the other was acquired in the United States but not in Florida. The Florida case was a white non-Hispanic male that resided in the southern region of Florida, and experienced symptom onset in June. This case met the case definition for confirmed Anaplasmosis.

North- Alachua, Baker, Bradford, Citrus, Clay, Columbia, Dixie, Duval, Flagler, Gilchrist, Hamilton, Hernando, Lafayette, Lake, Levy, Madison, Marion, Nassau, Orange, Pasco, Putnam, Seminole, St. Johns, Sumter, Suwannee, Taylor, Union, Volusia.

Central- Brevard, DeSoto, Hardee, Highlands, Hillsborough, Indian River, Manatee, Okeechobee, Osceola, Pinellas, Polk, Sarasota, St. Lucie.

South- Broward, Charlotte, Collier, Glades, Hendry, Lee, Martin, Miami-Dade, Monroe, Palm Beach.

Panhandle- Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Okaloosa, Santa Rosa, Wakulla, Walton, Washington.

^{*}For the purpose of this analysis, Florida counties were divided into regions as follows: